

Claims

- [c1] A method for enhancing recognizability of objects/groups in a workspace, comprising:
 - determining whether a first object/group is moved to a location within a predetermined distance of a second object/group; and
 - assigning a display cue of the second object/group to the first object/group upon placement of the first object/group in the workspace, whereby the first object/group and the second object/group form a group.
- [c2] The method of claim 1, wherein the objects/groups are free-format.
- [c3] The method of claim 1, wherein the display cue includes at least one of group-specific background color for objects/groups, group-specific color for text of objects/groups, group-specific color for bounding lines for objects/groups, colored halos or containers for objects/groups, colored regions surrounding objects/groups, line pattern boundaries for objects/groups, unique halftone or gray-shade boundaries for objects/groups, common font for text of objects/groups, and title bars.

- [c4] The method of claim 1, further comprising temporarily assigning the display cue of the second object/group to the first object/group when the first object/group is moved to a location within the predetermined distance of the second object/group.
- [c5] The method of claim 1, further comprising:
 - determining whether the second object/group has an assigned display cue; and
 - when the second object/group is determined not to have an assigned display cue, assigning another display cue that is different from a display cue of neighboring objects/groups
- [c6] The method of claim 1, further comprising when the first object/group is determined not to be within the predetermined distance of the second object/group, identifying the first object/group as unassigned.
- [c7] The method of claim 1, wherein the first object/group is a new object.
- [c8] The method of claim 1, wherein the first object/group is an existing object/group being moved from another location in the workspace.
- [c9] The method of claim 1, wherein the predetermined dis-

tance is at least one of a distance from the closest object in the second object/group, a distance from the center of the second object/group, and a distance from group membership display cues.

- [c10] The method of claim 1, further comprising providing a boundary of the second object/group when the first object/group is within the predetermined distance.
- [c11] The method of claim 10, wherein the boundary is at least one of rectangular, circular and polygonal.
- [c12] The method of claim 1, further comprising assigning a new display cue to the first object/group and the second object/group upon placement of the first object/group at the location, when the second object/group is determined not to have an assigned display cue, whereby the first object/group and the second object/group form a new group.
- [c13] The method of claim 1, further comprising:
 - providing an option not to assign the display cue to the first object/group; and
 - maintaining an original assignment of a display cue of the first object/group.
- [c14] A system that enhances recognizability of objects/groups in a workspace, comprising:

a display cue assignment circuit that determines whether a first object/group is moved to a location within a predetermined distance of a second object/group, and assigns a display cue of the second object/group to the first object/group upon placement of the first object/group at the location; an object placement circuit that places at least one first object at the location; and an object grouping circuit that groups the first object/group and the second object/group when the first object/group is assigned the display cue of the second object/group.

- [c15] The system of claim 14, wherein the objects/groups are free-format.
- [c16] The system of claim 14, wherein the display cue includes at least one of group-specific background color for objects/groups, group-specific color for text of objects/groups, group-specific color for bounding lines for objects/groups, colored halos or containers for objects/groups, colored regions surrounding objects/groups, line pattern boundaries for objects/groups, unique halftone or gray-shade boundaries for objects/groups, common font for text of objects/groups, and title bars.
- [c17] The system of claim 14, wherein the display cue assign-

ment circuit temporarily assigns the display cue of the second object/group to the first object/group when the first object/group is moved to a location within the pre-determined distance of the second object/group.

- [c18] The system of claim 14, wherein the display cue assignment circuit determines whether the second object/group has an assigned display cue, and when the second object/group is determined not to have an assigned display cue, assigns another display cue that is different from a display cue of neighboring objects/groups
- [c19] The system of claim 14, wherein when the display cue assignment circuit determines that the first objects/groups is not within the predetermined distance of the second object/group, the display cue assignment circuit identifies the first object/group as unassigned.
- [c20] The system of claim 14, wherein the first object/group is a new object.
- [c21] The system of claim 14, wherein the first object/group is an existing object/group being moved from another location in the workspace.
- [c22] The system of claim 14, wherein the predetermined distance is at least one of a distance from the closest object in the second object/group, a distance from the center

of the second object/group, and a distance from group membership display cues.

- [c23] The system of claim 14, further comprising a preview circuit that provides a boundary of the second object/group when the first object/group is within the predetermined distance.
- [c24] The system of claim 23, wherein the boundary is at least one of rectangular, circular and polygonal.
- [c25] The system of claim 14, wherein the display cue assignment circuit assigns a new display cue to the first object/group and the second object/group upon placement of the first object/group at the location, when the second object/group is determined not to have an assigned display cue, whereby the object grouping circuit groups the first object/group and the second object/group.
- [c26] The system of claim 14, wherein the object grouping circuit provides an option not to assign the display cue to the first object/group, and the display cue assignment circuit maintains an original assignment of a display cue of the first object/group.
- [c27] A computer readable storage medium comprising:
 - computer readable program code embodied on the computer readable storage medium, the computer

readable program code usable to program a computer to program a method for enhancing recognizability of objects/groups in a workspace, the method comprising:

determining whether a first object/group is moved to a location within a predetermined distance of a second object/group; and

assigning a display cue of the second object/group to the first object/group upon placement of the first object/group in the workspace, whereby the first object/group and the second object/group form a group.

- [c28] The computer readable storage medium of claim 27, wherein the objects/groups are free-format.
- [c29] The computer readable storage medium of claim 27, wherein the display cue includes at least one of group-specific background color for objects/groups, group-specific color for text of objects/groups, group-specific color for bounding lines for objects/groups, colored halos or containers for objects/groups, colored regions surrounding objects/groups, line pattern boundaries for objects/groups, unique halftone or gray-shade boundaries for objects/groups, common font for text of objects/groups, and title bars.

- [c30] The computer readable storage medium of claim 27, further comprising temporarily assigning the display cue of the second object/group to the first object/group when the first object/group is moved to a location within the predetermined distance of the second object/group.
- [c31] The computer readable storage medium of claim 27, wherein the method further comprises:
 - determining whether the second object/group has an assigned display cue; and
 - when the second object/group determined not to have an assigned display cue, assigning another display cue that is different from a display cue of neighboring objects/groups
- [c32] The computer readable storage medium of claim 27, wherein the method further comprises when that the first objects/groups is determined not to be within the predetermined distance of the second object/group, identifying the first object/group as unassigned.
- [c33] The computer readable storage medium of claim 27, wherein the first object/group is a new object.
- [c34] The computer readable storage medium of claim 27, wherein the first object/group is an existing object/group being moved from another location in the

workspace.

- [c35] The computer readable storage medium of claim 27, wherein the predetermined distance is at least one of a distance from the closest object in the second object/group, a distance from the center of the second object/group, and a distance from group membership display cues.
- [c36] The computer readable storage medium of claim 27, wherein the method further comprises providing a boundary of the second object/group when the first object/group is within the predetermined distance.
- [c37] The computer readable storage medium of claim 27, wherein the boundary is at least one of rectangular, circular and polygonal.
- [c38] The computer readable storage medium of claim 27, wherein the method further comprises assigning a new display cue to the first object/group and the second object/group upon placement of the first object/group at the location, when the second object/group is determined not to have an assigned display cue, whereby the first object/group and the second object/group form a new group.
- [c39] The computer readable storage medium of claim 27,

wherein the method further comprises:

providing an option not to assign the display cue to the first object/group; and
maintaining an original assignment of a display cue of the first object/group.

[c40] A carrier wave encoded to transmit a control program usable for enhancing recognizability of objects/groups in a workspace, wherein the objects/groups are free-format, the control program comprising:

instructions for determining whether a first object/group is moved to a location within a predetermined distance of a second object/group; and
instructions for assigning a display cue of the second object/group to the first object/group upon placement of the first object/group in the workspace, whereby the first object/group and the second object/group form a group.